



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,131	08/28/2003	Kiyoji Mingishi	59558.00019	5529

32294 7590 12/14/2004

SQUIRE, SANDERS & DEMPSEY L.L.P.  
14TH FLOOR  
8000 TOWERS CRESCENT  
TYSONS CORNER, VA 22182

EXAMINER

LEWIS, TISHA D

ART UNIT PAPER NUMBER

3681

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/650,131

Applicant(s)

MINGISHI ET AL.

Examiner

TISHA D. LEWIS

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 6-10, 13, 14, 19-26, 33-36, 38 and 40-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 11, 12, 15-18, 32, 37 and 39 is/are rejected.
- 7) ☒ Claim(s) 3, 4 and 27-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

The following is a first action on the merits of application serial no. 10/650,131 filed on August 28, 2003.

#### ***Election/Restrictions***

Applicant's election with traverse of Species I in the reply filed on October 28, 2004 is acknowledged. The traversal is on the ground(s) that all the figures are of the same invention and Figures 5-19 are directed to different configurations of the same invention. This is not found persuasive because applicant admits that Figures 5-19 are different configurations of the invention and therefore are considered different species of the invention.

The requirement is still deemed proper and is therefore made FINAL.

Claims 6-10, 13, 14, 19-26, 33-36, 38 and 40-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 28, 2004.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

The information disclosure statement filed on June 28, 2004 has been acknowledged.

***Specification***

The abstract of the disclosure is objected to because the words in lines 5 and 6 are separated by large spaces therebetween. Correction is required. See MPEP § 608.01(b).

***Claim Objections***

Claim 32 is objected to because of the following informalities:

-the limitation "a difference in a difference number of teeth" should be clarified and/or reworded. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation "the slide advancing member" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim, (this member is introduced in claim 6, not claim 5).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 15, 16, 18, 32, 37 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukaya ('883). As to claims 1 and 39, Fukaya discloses a transmission having an input shaft (41), an output shaft (53), a plurality of planetary mechanisms having an external (43) and internal (46) gear with a slight difference in teeth by one, being parallel to each other and having different transmission power characteristics wherein the speed of the second mechanism is slower than the speed of the first mechanism (speed of second is lowered again after speed of first is lowered).

As to claim 2, Fukaya discloses the first mechanism having a lower rotational resistance than the second mechanism due to the second mechanism being lowered in speed by the first mechanism.

As to claim 5, Fukaya discloses pins (45<sub>1</sub>) having a different sliding manner from pins (45<sub>2</sub>) due to the lowered speed of the second mechanism.

As to claims 15 and 37, Fukaya discloses eccentrics (50<sub>1</sub> and 50<sub>2</sub>) used to oscillate the external gear which is different in sliding manner due to the lowered speed of the second mechanism.

Art Unit: 3681

As to claims 18 and 32, Fukaya discloses a different number of teeth between the internal and external gear which can cause a difference in meshing between the two mechanism.

Claims 1, 2, 5, 15, 16-18, 32, 37 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Minegishi et al ('747). As to claims 1 and 39, Minegishi et al discloses a transmission having an input shaft (510), an output shaft (520), a plurality of planetary mechanisms having an external (576) and internal (506) gear with a slight difference in teeth by one, being parallel to each other and having different transmission power characteristics wherein the speed of the second mechanism is slower than the speed of the first mechanism (speed of second is lowered again after speed of first is lowered).

As to claim 2, Minegishi et al discloses the first mechanism having a lower rotational resistance than the second mechanism due to the second mechanism being lowered in speed by the first mechanism.

As to claims 5, 15 and 37, Minegishi et al discloses eccentrics (570A and 570B) used to oscillate the external gear which is different in sliding manner due to the lowered speed of the second mechanism.

As to claim 16, Minegishi et al discloses an inner pin hole (578A and 578B) formed in the external gear and inner pins (540) fitted into the holes wherein the pins rotate faster than the holes during operation due to the input speed from the motor.

Art Unit: 3681

As to claim 17, Minegishi et al discloses the internal gear having circular grooves for receiving outer pins (580) wherein the outer pins rotate faster than the circular grooves.

As to claims 18 and 32, Minegishi et al discloses a different number of teeth between the internal and external gear which can cause a difference in meshing between the two mechanism.

### ***Allowable Subject Matter***

Claims 3, 4 and 27-31 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 11 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326 before final and 703-872-9327 after final**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

Art Unit: 3681

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 000-0000) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

\_\_\_\_\_  
(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Tesar ('274) and Regner ('708)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 703-305-0921. The examiner can normally be reached on M-Thur 8 AM TO 3 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tdl  
December 12, 2004

  
TISHA LEWIS  
PRIMARY EXAMINER  
Au 3681 12/12/04